

EXHIBIT A

Margaret Craig v. Cheatham County, Tennessee, et al.

Dr. Rathel Nolan

May 21, 2019

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1 A. The earliest records I have were after she
2 had an apparent overdose on benzodiazepine. So I
3 have nothing prior to that.

4 Q. The first thing in your report is a
5 discussion of her treatment at Gateway on
6 September 30, 2016. Are those the oldest records
7 that you've been given to review?

8 A. Yes.

9 Q. So as far as that initial treatment at
10 Gateway, just going through your report, Ms. Hulsey
11 was admitted to the hospital for an overdose on
12 narcotics, correct?

13 A. Yes.

14 Q. You have the drug screen was positive for
15 benzodiazepines, opiates, methamphetamine and
16 cannabis, correct?

17 A. Yes.

18 Q. And is it your understanding that
19 Ms. Hulsey had a lengthy history of drug use,
20 including intravenous drug use?

21 A. I would presume so, yes.

22 Q. And the multiple needle track marks on her
23 skin were consistent with IV drug use; is that
24 correct?

25 A. Yes.

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1 Q. So when she got to the hospital she had
2 urine and blood cultures taken at some point,
3 correct?

4 A. Yes.

5 Q. She had been admitted to the hospital at
6 4:19 p.m. on September 30, 2016?

7 A. Yes.

8 Q. And those urine and blood cultures were
9 still pending at the time of her discharge roughly
10 17 hours later?

11 A. They were not finalized. That's correct.

12 Q. What does that mean for them to be
13 finalized?

14 A. Well, the attending physician said that
15 she had gram-positive cocci in her blood. And that
16 narrows down the number of things that it could be,
17 but they had not identified it as staphylococcus
18 aureus yet.

19 Q. How long does that usually take to get
20 that final result?

21 A. It depends on the technique you're using.
22 But conventional technique 48 to 72 hours.

23 Q. All right. So Ms. Hulsey left that
24 facility against medical advice on October 1, 2016,
25 correct?

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1 A. Yes.

2 Q. But it looks, from the records, that her
3 treating physician knew enough to be concerned about
4 her leaving when she did, correct?

5 A. Yes.

6 Q. Why is that?

7 A. Well, because she has a history of IV drug
8 use and because she had the gram-positive cocci in
9 her blood stream, it's a fairly common thing for
10 drug abusers to have just what she had, which is
11 endocarditis. So there would be a concern that she
12 was bacteremic from something like staphylococcal
13 endocarditis or some other infections. Sometimes
14 they get joint infections when they inject into the
15 joints. So yes, it was a concern.

16 Q. What does it mean to be bacteremic?

17 A. It means they have -- physically have
18 bacteria in your blood stream.

19 Q. Is that -- are these two separate issues,
20 being bacteremic and the endocarditis?

21 A. No. Endocarditis is a cause of
22 bacteremia, but it's not the only cause of
23 bacteremia.

24 Q. Describe what endocarditis is if you
25 would?

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1 A. Well, endocarditis is an infection on one
2 of the valves of the heart. And I don't know how
3 much of a description you want. But you have a
4 little blood clot that forms on the heart. And
5 those probably form normally and dissolve normally
6 in every one every day. But you get a clot on the
7 heart valve and the bacteria get into that clot and
8 they tend to grow. The clot gets bigger and people
9 -- as the heart beats, the valve opens and closes
10 and it flicks the bacteria out into the circulation.
11 So you have the bacteria in the blood stream and it
12 can travel other places.

13 With her kind of endocarditis it would be
14 the lungs, which it apparently did. And eventually
15 it will eat up and destroy the heart valve, which
16 can have some hemodynamic consequences. It didn't
17 really in her because she had a tricuspid valve
18 endocarditis, which is a less important valve to
19 your health and well-being than some of the others.

20 That's probably more of an explanation
21 than you wanted, but...

22 Q. No, that's fine.

23 Was she more at risk of developing
24 endocarditis because of her chronic IV drug use?

25 A. Yes, she was. Because that's a bacteria

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1 that exists on the skin. And when you stick a
2 needle in your arm into a vein you risk dragging the
3 bacteria onto the needle and into the blood stream.

4 Q. Can you tell from the results how long she
5 had that infection when it was finally -- when the
6 results of her blood urine work were finalized?

7 A. During this admission or during her
8 terminal admission?

9 Q. During this admission?

10 A. No, you really can't.

11 Q. Does the physician, treating physician
12 need those final results from the blood and urine
13 analysis in order to make the diagnosis of
14 endocarditis?

15 A. Well, the -- that's part of it, yes. But
16 you need to show the blood clot, the vegetation on
17 the heart valve. And that was not done before she
18 left against medical advice.

19 So during her terminal admission they did
20 get the echocardiogram that showed that. It was
21 highly suspicious for that. If she had stayed
22 around they would have sorted that out.

23 Q. Had she stayed around?

24 A. Yes.

25 Q. But you believe that she had endocarditis

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1 as of that admission to Gateway Medical Center of
2 September 30, 2016?

3 A. Probably, yes.

4 Q. And at some point did they administer
5 antibiotics intravenously to her during that
6 hospital stay?

7 A. Yes, they did.

8 Q. Okay. I take it according to what her
9 treating physician wrote in the discharge note she
10 needed at least 24 hours of inpatient care or more,
11 correct?

12 A. Yes. That's kind of rogue statement for
13 Medicare, but, yes.

14 Q. She probably would have needed much more
15 inpatient treatment than 24 hours, would she not?

16 A. Yes.

17 Q. What's the typical length of IV antibiotic
18 treatment for someone with the infection that she
19 had?

20 A. For her -- well, it's kind -- I'm going to
21 make it a complicated question. It's a common
22 infection in IV drug users. And typically for
23 staphylococcal endocarditis you're going to treat
24 for at least four weeks of intravenous antibiotics.
25 IV antibiotics and intravenous drug users is

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1 difficult, so there are some shorter course oral
2 therapies that are given. But in the best of all
3 possible worlds, there would have been four weeks of
4 intravenous antibiotics.

5 Q. That she would have received on an
6 inpatient basis?

7 A. She -- well, she could have -- yeah, again
8 it's complicated. If she wasn't an IV drug user you
9 could send her home on IV antibiotics when she was
10 stabilized. But because she likes to put things
11 into IVs you probably wouldn't want to have done
12 that. So she probably would have been inpatient for
13 four weeks or some other arrangements would have
14 been made.

15 Q. So whatever IV antibiotic therapy she
16 received before she left against medical advice
17 would not have been enough to cure her infection,
18 correct?

19 A. No, it would not have been.

20 Q. And then is there any guarantee that even
21 if she had stayed at Gateway for four weeks of
22 antibiotic therapy that that would have cleared up
23 the infection?

24 A. Well, you can't guarantee anybody an
25 outcome. But more likely than not it would have

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1 Q. Was she extremely ill as of September 30,
2 2016?

3 A. Yes.

4 Q. What do you mean by extremely ill?

5 A. She had a life-threatening infection.

6 Staphylococcal endocarditis is a bad actor and you
7 tend to kind of -- people rock on with it for a
8 while, but untreated it's -- endocarditis untreated
9 is a hundred percent fatal. You just have to -- it
10 just depends on how long it takes.

11 Q. You also put in your report, "It's safe to
12 assume that her severe illness would have been
13 apparent to the most casual observer." That's the
14 sentence after the October 6th incarceration. Are
15 you referring to October 6, 2016 in that sentence?

16 A. Yes.

17 Q. Would her illness have been apparent to a
18 casual observer as of September 30, 2016?

19 A. Well, probably. I would have to look back
20 specifically at that in the records. Because you
21 have people who are not casual observers who saw
22 her. And I would be interested to see if any of the
23 physicians or other providers made comments about
24 she looks sick. Yeah, I think she would have looked
25 sick. She would have looked chronically ill then

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1 too long. But it's complicated also by her IV drug
2 use and her other substance abuse. Because those
3 folks tend to look ill anyway. Because if you've
4 used drugs a bunch then sometimes you don't --
5 methamphetamine, you don't sleep for days. That
6 makes you look bad. You have less attention to your
7 personal hygiene. Your diet goes to hell. People
8 don't eat very well when they're taking stimulant
9 drugs like methamphetamine.

10 So, yeah, she may have looked sick for a
11 long time. So that's probably -- I'm sorry, I'm
12 rambling. I'm just thinking out loud and rambling.

13 Q. A person's physical appearance who has
14 bacteremia would be similar to the physical
15 appearance of an IV drug user; is that a fair
16 statement?

17 A. It could be, yes. That's such a broad
18 generalization, but it could be.

19 Q. How do you differentiate between whether
20 someone's got bacteremia or is an IV drug user?

21 A. Blood cultures.

22 Q. One more question going to back the
23 sentence that says, "Although I was, of course, not
24 present it's safe to assume that her severe illness
25 would have been apparent to the most casual

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1 So looking at somebody you may be able to
2 suspect that. But in and of itself, just looking at
3 somebody, no, you can't tell that they're
4 bacteremic.

5 Q. Is that for a medical professional, just
6 looking at someone wouldn't be able to tell that
7 they're bacteremic?

8 A. No, you could not.

9 Q. Same goes for a layperson? A layperson
10 could not look at someone and be able to tell that
11 that person is bacteremic, correct?

12 A. Not anyone I've ever heard of.

13 Q. So then Ms. Hulsey went to Centennial
14 Medical Center two days later on October 3, 2016,
15 correct?

16 A. Yes.

17 Q. And her complaint at that time was
18 drooping on the left side of her face for two days,
19 correct?

20 A. Yes.

21 Q. And she was diagnosed with Bell's Palsy,
22 correct?

23 A. That's what they said.

24 Q. Okay. Following up on what you just said,
25 do you question that diagnosis?

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1 doctor disconnect and...

2 She had an elevated serum creatinine when
3 she was seen there, which is a marker for a kidney
4 injury. But during her final admission her
5 creatinine had declined almost towards normal. So
6 I'm not sure what to make of that. I think that was
7 probably dehydration and not a direct affect on the
8 kidneys. But at that point about the only way you
9 could tell is by autopsy.

10 Q. I'm reading from the bottom of the third
11 page of your letter to Mr. Moseley.

12 A. Yeah. Third page? Let's see. Yeah, and
13 I'm going to have to back pedal on that. Because
14 that could have been -- after reading the records a
15 couple more times -- that could have been because of
16 spread to the kidneys. But because her renal
17 function was better and almost normal during her
18 admission following her incarceration, I'm not sure
19 about that.

20 Q. But you still think that by October 3rd
21 the infection had spread to her brain, correct?

22 A. Yes. That is the most plausible
23 explanation for her facial drooping.

24 Q. That she had a stroke? Did she have a
25 stroke, in your opinion?

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1 A. No. She may have had an abscess that was
2 acting the same way a stroke would act. So again, I
3 get into my semantical stuff, is that a stroke?
4 It's a stroke-like illness, yes.

5 Q. But it does not appear at any time during
6 the October 3, 2016 treatment at Centennial that she
7 was ever diagnosed as being bacteremic, correct?

8 A. Correct. But I would add that she had a
9 low platelet count and a high white count and a
10 creatinine of three and a half and a high white
11 count anemic. And any one of those things were a
12 reason enough to put her in the hospital.

13 Q. Yeah. But for whatever reason even with
14 all those lab results, the treating physician did
15 not diagnose her as being bacteremic or want to
16 admit her to the hospital, correct?

17 A. That's correct.

18 Q. And then turning to -- she was detained
19 beginning on October 6, 2016. Once she was detained
20 in the jail and would not have had access to drugs,
21 would you have expected her to experience withdrawal
22 symptoms?

23 A. I wouldn't have been surprised. I don't
24 know that I would have expected it. But she was
25 using so many different things -- yeah, I mean, she

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1 could have been habituated to any number of things
2 or she might not have been. It's just hard to
3 predict. Again, I don't have the records
4 previously. We don't have much of an account of how
5 much she took of what. So yeah, I wouldn't have
6 been surprised. I don't know if I would have
7 expected it.

8 Q. When would those symptoms of withdrawal
9 usually have started?

10 A. Which drug are we talking about?

11 Q. Let's start with opiates.

12 A. Now, I'm going to be getting out of my
13 depth. Probably within about two of three days
14 after she's absent for opiates.

15 Q. What about benzodiazepines?

16 A. Depends on if she's been using long-acting
17 or short-acting benzodiazepines. Some of them get
18 out of your system pretty quickly. And some of them
19 hang around for a long time. So it can go from a
20 couple of days to a week or so.

21 Q. What about methamphetamine? How long
22 would you have expected her to start experiencing
23 withdrawal symptoms?

24 A. Again, I'm getting out of my depth with
25 this because that's not something I do on a daily

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1 basis. Probably about 72 hours.

2 Q. If she was experiencing symptoms
3 withdrawal from the drugs she had been taking, what
4 signs and symptoms would you have expected to see?

5 A. Again, that varies from medication to
6 medication and -- from drug of abuse to drug of
7 abuse, I'm sorry. Because stimulant drugs, when you
8 get off of them -- like methamphetamine is a
9 stimulant drug. And when you quit taking that, it's
10 like fatigue, depression and somnolence. And then
11 when you quit taking benzodiazepines then it's sort
12 of the opposite. You're off the depressive
13 medication and you have more excitability. It can
14 induce seizures. Then narcotic withdrawals are more
15 agitation, diarrhea, sweating, things of that
16 nature.

17 Q. Would you expect someone to experience flu
18 like symptoms who's experiencing drug withdrawals?

19 A. Broadly sure. You wouldn't feel good.

20 Q. Would you expect someone who was
21 bacteremic like Ms. Hulsey was to experience flu
22 like symptoms?

23 A. Yes. Yeah, if it's severe -- broadly,
24 yes, it would be some of that.

25 Q. So when she came to the jail -- or

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1 whenever she started experiencing symptoms of
2 withdrawal when she was in jail, those symptoms
3 would have looked similar to someone who was
4 bacteremic; is that fair?

5 A. It could have.

6 Q. We've already discussed a layperson
7 wouldn't be able to look at Ms. Hulsey when she's in
8 the jail and be able to discern whether the symptoms
9 she was demonstrating were consistent with drug
10 withdrawals or bacteremia, correct?

11 A. Well, are we talking about -- through her
12 entire incarceration were two things. One, she was
13 incontinent of stool. And that generally gets
14 anybody attention when she's defecating on herself.
15 And then she had a seizer-like episode and had no
16 history of prior seizure-like episodes. And I'll
17 grant you the rest, that it would be hard to tell.
18 But once she had these seizure-like episodes, she
19 needed to be transferred to a hospital. That should
20 have been obvious. That she needed to be evaluated
21 by a physician.

22 Q. So the incontinence, is that related to
23 bacteremia or to drug withdrawals or both?

24 A. Don't know. It's not a common finding and
25 -- it's not something that, you know, you say

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1 deposition testimony that Ms. Hulsey -- "She had
2 what appeared to me as a seizure." Correct?

3 A. Yes.

4 Q. Okay. If -- obviously you didn't witness
5 what happened, correct?

6 A. Oh, obviously not. Yes.

7 Q. Can you make a diagnosis that someone has
8 suffered a seizure based just on what Ms. Durham
9 testified that appeared to her to be a seizure?

10 A. Well, it's not really pertinent to my
11 opinion. But no I couldn't third-handedly do so.

12 Q. Okay. Same thing, you couldn't -- if
13 Ms. Newman were to testify that she saw what
14 appeared to her to be a seizure, you couldn't make a
15 diagnosis that a person suffered from a seizure
16 based just on what Ms. Newman said, correct?

17 A. Correct.

18 Q. You don't -- you don't rely on a
19 layperson's characterization of a medical event in
20 making a diagnosis, correct?

21 A. Not solely, but you certainly take those
22 things into account. I mean, whenever you make a
23 diagnosis you're usually talking to a layperson.

24 Q. Right. But you -- there could have other
25 things that would have explained whatever this